

Vertiv™ Avocent® HMX 6200 DP Series High Performance KVM Extender System Release Notes

VERSION 6.0, SEPTEMBER 2023

Release Notes Section Outline

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1. General Overview

These release notes detail upgrade instructions and provide release-specific information for the Vertiv™ Avocent® HMX 6200 DisplayPort (DP) series high performance KVM extenders. For additional product information, please refer to the Vertiv™ Avocent® HMX High Performance KVM Extender System Installer/User Guide and the Vertiv™ Avocent® HMX Advanced Manager Installer/User Guide; both available on their respective product pages at www.vertiv.com.

2. Upgrade Instructions

Transmitters and receivers are flash upgradable at any time to ensure that your system is running the most current version available. If your system is running the most current firmware version and is managed by the Vertiv™ Avocent® HMX Advanced Manager software, then that same version must be used across all units in your system. Firmware versions can be mixed in configurations not using the Advanced Manager software, but it is always recommended to use the most current version. The Advanced Manager software On-Board Web Interface (OBWI) provides a central location for you to perform a firmware upgrade on any linked unit.

Pre-requisites

NOTE: A mixed system where the Vertiv™ Avocent® HMX Advanced Manager software is at version 4.4 and the Vertiv™ Avocent® HMX extender system transmitters and receivers are at version 4.5 is not supported.

- If the Vertiv™ Avocent® HMX 6200 DP extenders are being used in a Vertiv™ Avocent® HMX Advanced Manager, the manager must be upgraded to v5.3 or greater.
- If the Vertiv™ Avocent® HMX Advanced Manager software is upgraded to version 4.5, connected transmitters and receivers (endpoints) must also be upgraded to version 4.5 to maintain compatibility. As soon as you upgrade the software to version 4.5, you'll be prompted for this endpoint upgrade since the minimum hardware version has been set for version 4.5.
- Although the Vertiv™ Avocent® HMX Advanced Manager software may be upgraded directly to version 4.5, transmitters and receivers must be upgraded to version 4.4 prior to being upgraded to version 4.5.
- It is not possible to downgrade the extenders to version 4.1, 4.2 or 4.3.
- If your Vertiv™ Avocent® HMX Advanced Manager software is at version 4.1, 4.2 or 4.3, it must be upgraded to the same version as the endpoints.
- If your Vertiv™ Avocent® HMX Advanced Manager software server is used in a backup configuration, you must upgrade all the Manager software servers before upgrading the transmitters and receivers. See the Vertiv™ Avocent® HMX Advanced Manager Installer/User Guide for additional information.

Upgrading the Firmware

To upgrade the firmware on the Vertiv™ Avocent® HMX Advanced Manager server:

1. In the user interface (OBWI) of the Vertiv™ Avocent® HMX Advanced Manager server, or the primary server, select *Dashboard – Settings - Managers* and ensure that the Require Authentication radio button is set to No. If it is not set to No, change it and click *Save*.
2. Select *Dashboard - Backups* and ensure the backup option to Download to your computer is selected. Click *Backup Now*.
3. Using the Vertiv™ Avocent® HMX Advanced Manager software server, verify that all transmitters and receivers are connected and online.
4. Navigate to *Dashboard - Updates* and browse to the location of the software update file.
5. Select the file and click *Open*.
6. Click *Upload*. Do not restart or turn the Vertiv™ Avocent® HMX Advanced Manager software server off until the upgrade is complete.
7. After the upgrade is complete, click *Restart Now*.
NOTE: While the update is applied, the primary server temporarily loses communication. During this time, the backup server acts as the primary server. You are redirected to the backup server's web interface and automatically logged in. When the primary server becomes available, you are redirected back to that web interface.
8. If you have an Vertiv™ Avocent® HMX Advanced Manager backup server, repeat the steps above to upgrade the backup server. Then, proceed to the next step.
9. The upgrade should now be complete. To verify, select *Dashboard – Settings - Managers* on the primary Vertiv™ Avocent® HMX Advanced Manager software server and confirm both servers are upgraded and synchronized.

To upgrade the firmware on the transmitters and receivers:

1. In the user interface (OBWI) of the Vertiv™ Avocent® HMX Advanced Manager server, select *Dashboard - Updates*.
2. In the Upload new TX/RX Firmware section, click *Browse*.
3. Select the firmware file and click *Open*.
4. Click *Upload*.
5. For each transmitter and receiver to be upgraded, select the corresponding checkbox.
 -or-
 Select the Upgrade All checkbox.
6. Click *Upgrade Selected Transmitters*.
 -or-
 Click *Upgrade Selected Receivers*.

3. Package Version Information

APPLIANCE/PRODUCT	IMAGE/CODE VERSION
Vertiv™ Avocent® HMX 6200 DP Transmitters and Receivers	V6.006

4. Features and Enhancements

This version of the Vertiv™ Avocent® HMX 6200 DP extenders adds the following features and enhancements:

NOTE: This release requires Vertiv™ Avocent® HMX Advanced Manager software version 4.12 or higher.

- Adds support for the Vertiv™ Avocent® HMX 6200 HDMI transmitter.
- Adds support for DP and HDMI audio (2 channel embedded digital audio).
- Adds support for Analog audio – (2 channel uni-directional analog audio).

NOTE: This requires the Vertiv™ Avocent® HMX Advanced Manager v5.6 in a controlled system.

- Adds support for USB connections to serial devices.
 - If the serial port is enabled, a “USB to serial adapter” connected to the receiver is automatically routed to the transmitter’s physical serial port (if present) to enable end-to-end serial extension.
 - If the serial port is disabled, the “USB to serial adapter” is extended and appears as a USB serial device on the computer.
- Adds an update to the On-Screen Status notifications.

5. Resolved Issues

AREA	ISSUE DESCRIPTIONS
Audio	<ul style="list-style-type: none"> • Analog audio is out of sync. • DP digital audio is supported. • Analog audio input was implemented for transmitters.
Network	<ul style="list-style-type: none"> • For SFPs on network switches, auto-negotiate should be set to OFF (None). • Receivers are unable to communicate with transmitters in a multi-subnet matrix (self-managed mode). • When DHCP is disabled, DHCP classless routes are deleted. • The Vertiv™ Avocent® HMX 5000/6000 extender system does not talk to the Vertiv™ Avocent® HMX 6200 DP extenders over Fiber connections. • Static IP addresses are supported. • Connections using full length IP addresses, such as XXX.XXX.XXX.XXX, would fail.
USB	<ul style="list-style-type: none"> • Sometimes, PCs fail to notice hot plug detections from the transmitter. • Support for Xpression (Devlin) keyboard has been added. • Serial data can be routed with “USB to Serial adapters.” • USB-to-MIDI converters are now supported. • USB audio is delayed. • The AXIS T8312 keypad is now supported. • The transmitter should not wait on Source PC powered state before asserting hot plug.
Web User Interface (UI)	<ul style="list-style-type: none"> • If the password was changed, the web UI became unusable due to a “connection lost.” This effected units in either the self-managed matrix modes or point-to-point operation if “Passwords” were set to protect the pages. If v6.04 has been used, perform a factory reset on the unit(s), upgrade to v6.06 and reapply the settings. • The Channel connection status (Video, Audio and USB) is intermittently reporting incorrectly to the Vertiv™ Avocent® HMX Advanced Manager.
Video	<ul style="list-style-type: none"> • The receiver fails to correctly prune EDID sent to the Vertiv™ Avocent® 5000/6000 series transmitters, resulting in no video or 640 x 480 resolution. • Sometimes, hot plugging HDMI or DP monitors on the receiver fails. • Video doesn't come back on the second head if the monitor is turned off, then back on. • Transmitters are allowed to transmit video with Unknown Colorimetry or Dynamic Range from the monitor.

6. Known Issues

The following issues apply to this version of the Vertiv™ Avocent® HMX 6200 DP extenders.

AREA	ISSUE DESCRIPTION	IMPACT
Audio	The occasional stutter occurs in digital audio caused by the receiver.	This is graphic card- and monitor-dependent. In testing, some AMD graphics cards have triggered a pop/click in one minute intervals.
Upgrade	In point-to-point mode, uploading new firmware via a URL causes audio and video artifacts. This is caused by the upload using the Ethernet, as well as video and audio.	Avoid upgrading while the system is actively being used.
USB	Some keyboards with smart card readers, specifically Dell RT7D60, can stop responding for up to one minute after a channel change if there is no smart card present.	To prevent delays, ensure you have a smart card present in the keyboard.
Web UI	<ul style="list-style-type: none"> In point-to-point mode, changing the name of a transmitter causes the receiver units to disconnect, then reconnect. The OSD becomes unresponsive if the user password is changed on the web UI. 	<ul style="list-style-type: none"> Avoid changing any unit names while the system is actively being used. Don't change the password while the OSD is open. Reboot the unit to recover.
Video	<ul style="list-style-type: none"> 2560 x 1440p30 to 60Hz output is not working. The receiver does not display video when using an active DP-to-DVI dual-link adapter. The receiver does not display video when using fixed EDID 1920 x 1440@85Hz. 	<ul style="list-style-type: none"> This will be fixed in a future release. Not all adapters are created evenly, meaning it is adapter-, manufacturer- and monitor-dependent if they work at all resolutions. This will work if the source uses reduced blanking, which has a clock frequency of less than 300MHz. CEA timings exceed 300MHz, so the video is blanked.